

Abstract

Described are novel antibodies specifically recognizing a distinct population of human dendritic cells (DCs) and methods of isolating said DCs using said antibodies. Furthermore, antigens and epitopes recognized by the above-described antibodies as well as polynucleotides encoding said antibodies are provided. Also provided are vectors comprising said polynucleotides as well as host cells transformed therewith and their use in the production of said antibodies. Additionally, polypeptides comprising a domain of the binding site of the aforementioned antibodies, or an antigen or epitope described above and at least one further, preferably functional domain as well as polynucleotides encoding such polypeptides are described. Furthermore, vectors comprising said polynucleotides, host cells transfected with said polynucleotide or vector and their use for the preparation of the above-described polypeptides are provided. Described is further a method for isolating or identifying DCs as defined above as well as DCs obtainable by said method and/or characterized by recognition of the above-described antibody, and/or containing the aforementioned antigen or epitope. Moreover, a method for preparing or identifying T cells in a certain status as well as methods for identifying compounds which interfere with T cell mediated activation of immune responses are described. In addition kits, and compositions, preferably pharmaceutical and diagnostic compositions are provided comprising any of the aforescribed antibodies, antigens, epitopes, polypeptides, polynucleotides, vectors, dendritic cells or T cells or compounds obtainable by the aforementioned method. Further described are vaccines comprising antigens exposed to dendritic cells, antigen expressing DCs or comprising an antigen or epitope mentioned before. Furthermore, dendritic cells for immunopotentiating compositions are provided. Moreover, the use of T cells obtainable by the above-described method, the aforementioned DCs, antibodies, nucleotides and vectors in adoptive immunotherapy, preferably against cancer and infectious diseases and for the identification of new antigenic targets for immunotherapy is described.